



April 27, 2021

Ms. Vanessa Countryman  
Secretary  
Securities and Exchange Commission  
100 F Street NE  
Washington, DC 02549-1090

**Re: Nasdaq Carteret Data Center Roof and Fair Market Access (File No. 4-729)**

Dear Ms. Countryman:

GTS Securities LLC ("GTS") respectfully submits this letter to the Securities and Exchange Commission to add its support to other commenters who have raised questions about fair market access at Nasdaq Stock Market LLC's Carteret Data Center.

GTS shares the concerns outlined by McKay Brothers LLC in its December 10, 2020 letter to the Commission regarding Nasdaq's package of wireless connectivity and market data services (the "Wireless Services").<sup>1</sup> In particular, we are concerned that the Wireless Services may provide a potential latency advantage that is available to some, but not all, market participants; and that the Wireless Services that Nasdaq is currently delivering may be materially different from the Wireless Services description that the Commission approved for Nasdaq in 2013.

The issue of fair market access has been vigorously debated before the Commission, most recently in connection with the NYSE's data center in Mahwah, NJ. In that case, the NYSE proposed for an exchange affiliate (ICE Data Services, referred to herein as "IDS") to install wireless equipment on the roof of the NYSE's Mahwah data center that would connect customers to the NYSE's systems. The on-premises location of IDS's equipment, compared to the off-premises location available to competing third party providers, would have provided IDS with a distinct and inescapable geographic latency advantage. In response to industry concerns, the NYSE eventually submitted a rule filing (the "NYSE Filing") seeking, in the alternative, a declaration from the Commission that IDS's wireless services were not "facilities of an exchange" subject to Commission review (because they were owned by an affiliate, not the NYSE itself); or if the wireless services were deemed a facility of an exchange, then permission for IDS to operate the wireless services as a facility of the exchange.<sup>2</sup> The Commission determined that the NYSE's wireless

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<sup>1</sup> Letter of Jim Considine, Chief Financial Officer, McKay Brothers LLC (December 10, 2020), available at <https://www.sec.gov/comments/4-729/4729-8131081-226476.pdf>. See also Letter of Joanna Mallers, Secretary, FIA Principal Traders Group (February 11, 2021), available at <https://www.sec.gov/comments/4-729/4729-8369394-229225.pdf>; Letter of Gregory Babyak, Global Head of Regulatory Affairs, Bloomberg L.P. (March 1, 2021), available at <https://www.sec.gov/comments/4-729/4729-8426150-229604.pdf>

<sup>2</sup> See SR-NYSE-2020-05 (January 30, 2020) and accompanying amendments



services were indeed “facilities of an exchange” and required, as a condition of approving the NYSE Filing, that it implement measures to eliminate the competitive advantage (namely, installing a fiber

optic cable loop that equalizes the distance a signal travels from either IDS’s wireless equipment or third-parties’ equipment to the Exchange’s systems).<sup>3</sup>

As described more fully in the McKay Brothers letter, the placement of wireless equipment at Nasdaq’s Carteret data center presents the virtually identical problem: because it is located on the roof of the data center, the Wireless Services can offer lower transmission latency to Nasdaq’s customers compared to competing services located “on towers near the data centers”; in short, the Wireless Services offers a shorter path between subscribers’ systems and Nasdaq’s own systems and data.

In its 2012 application to offer the Wireless Services (approved January 31, 2013), Nasdaq acknowledged the discrepancy, but represented, among other things, that it did not control roof access: it claimed the owner of the facility – Verizon and later Equinix Inc. – could approve the installation of other carriers’ equipment.<sup>4</sup> This turned out to be untrue in practice. As the McKay Brothers’ letter notes, third-party providers who attempted to install equipment were told by Equinix that it was contractually prohibited by Nasdaq from doing so.<sup>5</sup>

Nasdaq also claimed that roof space was limited, and both technical complications and the lack of available space on the roof prevented it from providing universal access to the roof. This explanation is at odds with other data centers that Equinix operates, however, or indeed most other data centers worldwide, where rooftop space is widely available to all participants. It is also belied by recent changes at the Carteret data center to add six additional wireless radio antennas to the two existing antennas (for a total of eight). These antennas are operated by Apsara Networks, Nasdaq’s service provider for the Wireless Services. Recently, Apsara has begun offering its own independent wireless connectivity to Nasdaq via the Carteret rooftop antennas, but only to a limited number of customers (between three and eight).

Finally, Nasdaq claimed that any latency advantage accruing to customers of the Wireless Services because of the location of the wireless equipment was negligible at best – between 50 and 200 nanoseconds (“.5 to 2 microseconds”).<sup>6</sup> Whether this was “negligible” even in 2012 is open to debate, but subsequent advances in network transmission technology have transformed formerly negligible latency differences into material discrepancies, such that differences of 10 nanoseconds are now dispositive of whose order gets priority. In a world where 10 nanoseconds can make a material difference, an advantage of between 50 and 200 nanoseconds is an insurmountable head-start. And because that head-start is only available to a handful of customers who are favored by Nasdaq and its preferred provider Apsara, it is the essence of unfair market access.

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<sup>3</sup> Sec. Exch. Act. Rel. 34-90209, 85 FR 67044 (October 15, 2020)

<sup>4</sup> See SR-NASDAQ-2012-119 (October 12, 2012), *approved*, Sec. Exch. Act Rel. 68735, 78 FR 6842 (January 31, 2013)

<sup>5</sup> McKay Brothers Letter at 7

<sup>6</sup> Letter of Jeffery S. Davis, Vice President & Deputy General Counsel, Nasdaq (January 24, 2013) at 3, available at <https://www.sec.gov/comments/sr-nasdaq-2012-119/nasdaq2012119-2.pdf>



GTS, along with the other commenters, believes that Nasdaq should be required to correct its discriminatory market access by allowing universal access to the Carteret data center roof, or if that is not technically feasible, then by eliminating any latency disadvantages faced by third-party providers whose closest connection points are limited to "towers near the data center." At the very least, Nasdaq's 2013 rule filing is out of date, and Nasdaq should therefore be required to submit an updated rule filing justifying the disparate treatment. In evaluating such a filing, the Commission should be guided by the NYSE Filing and the accompanying approval order as a clear roadmap for what is required of an exchange in this situation:

- Nasdaq's Wireless Services should be deemed a facility of the exchange that is subject to public rule filings and Commission review and approval;
- If Nasdaq allows access to the Carteret data center roof for some participants, it must offer the same access to all participants;
- If it is not feasible for Nasdaq to offer equal access to the Carteret data center roof to all participants, then Nasdaq must take affirmative steps to eliminate the latency disadvantage for customers who are not able to connect directly to the facilities on the Carteret data center roof.

GTS respectfully requests that the Commission consider requiring Nasdaq to provide additional information about the Wireless Services in the form of an updated rule filing, which will provide an opportunity for public comment. If the Commission determines that the Wireless Services are indeed a facility of the exchange, then we respectfully suggest that the Commission require Nasdaq to undertake the necessary steps to ensure that all market participants have equal and fair access to those facilities.

We would be happy to discuss these issues with the Commission directly. Thank you again for your attention to this issue.

Very truly yours,

A handwritten signature in black ink, appearing to read "A. Rubenstein", is written above the printed name.

Ari M. Rubenstein

Co-Founder and Chief Executive Officer

GTS